



Aviation Investigation Final Report

Location:	ALAGNAK RIVER, Alaska	Accident Number:	ANC97LA106
Date & Time:	July 19, 1997, 08:45 Local	Registration:	N68084
Aircraft:	de Havilland DHC-2	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation		

Analysis

The pilot was making a no-wind takeoff downstream from a 4,000-foot slow flowing river. The takeoff water run for the conditions was calculated at 1,300 feet. The pilot and passenger both reported a partial loss of engine RPM just prior to lift-off from the water. According to the pilot, there was insufficient stopping distance before reaching a river bank. The pilot rotated the airplane off the water below flying speed, cleared the bank, and settled back into the tundra. The pilot stated that a similar loss of engine RPM had happened before, but was considered transient.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: A partial loss of engine power for an undetermined reason, and the pilot's intentional operation of the airplane with known deficiencies.

Findings

Occurrence #1: LOSS OF ENGINE POWER
Phase of Operation: TAKEOFF - ROLL/RUN

Findings

1. (C) REASON FOR OCCURRENCE UNDETERMINED

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

2. (C) OPERATION WITH KNOWN DEFICIENCIES IN EQUIPMENT - INTENTIONAL - PILOT IN COMMAND
3. TERRAIN CONDITION - TUNDRA

Factual Information

On July 19, 1997, at 0845 Alaska daylight time, an amphibious float equipped DeHavilland DHC-2 airplane, N68084, sustained substantial damage when it impacted tundra during a takeoff from the Alagnak River, twenty-eight miles northwest of King Salmon, Alaska. The airline transport certificated pilot and single passenger were not injured. The airplane was operated by Lakeside Industries of Bellevue, Washington, to transport company employees to a fishing lodge. The flight was being conducted under 14 CFR Part 91 in visual meteorological conditions from the Alagnak River to King Salmon.

The pilot and passenger stated to the NTSB investigator that they were attempting to takeoff downstream on the slow flowing Alagnak River. Just prior to lifting off the water, they sensed a loss in engine RPM and no loss in manifold pressure. The pilot said he did not have room to abort the takeoff on the water, and rotated the airplane to clear the riverbank. The airplane impacted the tundra, remaining upright. Both wings and floats sustained substantial damage. The pilot stated that there had been two previous RPM drops on takeoff from the King Salmon runway, which self corrected, and were not considered significant. He stated he did not perform magneto checks on the day of the accident.

The pilot and passenger estimated 500 pounds of luggage on board. The pilot weighed 173 pounds, according to his second class medical dated May 5, 1997. The passenger weight was estimated at 180 pounds. The pilot stated there was sixty gallons of fuel on board (360 pounds). The empty weight of a representative amphibian DHC-2 on Wipline 2000 floats is 3,890 pounds. The seaplane takeoff distance given in the DHC-2 and U-6A(military DHC-2) operators manuals for the conditions is 1,300 feet. The pilot and passenger estimated the takeoff area to be 4,000 feet long, and downstream.

Both occupants stated that the airplane made an uneventful takeoff from the same location one hour earlier.

Pilot Information

Certificate:	Airline transport; Flight instructor	Age:	62, Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land; Multi-engine sea	Seat Occupied:	Left
Other Aircraft Rating(s):	Glider; Helicopter	Restraint Used:	
Instrument Rating(s):	Airplane; Helicopter	Second Pilot Present:	No
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Helicopter; Instrument airplane; Instrument helicopter	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	May 5, 1997
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	10000 hours (Total, all aircraft), 350 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	de Havilland	Registration:	N68084
Model/Series:	DHC-2 DHC-2	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	912
Landing Gear Type:	Amphibian; Float	Seats:	2
Date/Type of Last Inspection:	April 7, 1997 Annual	Certified Max Gross Wt.:	5100 lbs
Time Since Last Inspection:	200 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	7600 Hrs	Engine Manufacturer:	P&W
ELT:	Installed, activated	Engine Model/Series:	R-985
Registered Owner:	LEE R. RHOADY, JR	Rated Power:	450 Horsepower
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:	LAKESIDE INDUSTRIES	Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	AKN ,100 ft msl	Distance from Accident Site:	28 Nautical Miles
Observation Time:	08:51 Local	Direction from Accident Site:	150°
Lowest Cloud Condition:	Unknown	Visibility	7 miles
Lowest Ceiling:	Broken / 600 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	10 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	180°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	12°C / 10°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:		Type of Flight Plan Filed:	None
Destination:	KING SALMON , AK (AKN)	Type of Clearance:	None
Departure Time:	08:45 Local	Type of Airspace:	Class G

Airport Information

Airport:		Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	58.749549,-156.540527(est)

Administrative Information

Investigator In Charge (IIC):	Thomas, Matthew
Additional Participating Persons:	MICHAEL B BRICE; ANCHORAGE , AK
Original Publish Date:	November 10, 1998
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=3029

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The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, “accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person” (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB’s statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available [here](#).